Substitute for form 1449A/PTO	Complete II Known	required to respond to a collection of information unless it contains a valid QMB control numb
STATEMENT BY APPLICANT	Application Number	10/695,432
Use semany sheets as necessary)	Filing Date	October 28, 2003
	First Named Inventor	Kan, Edwin
	Group Art Unit	2812 5
	Examiner Name	Unknown A. Wilson
Sheet 1 of 4	Attorney Docket No: 1	153.078US1

		US P	ATENT DOCUMENT	S		
Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Class	Subclass	Filing Date If Appropriate
one	2002/0117659A1	08/29/2002	Lieber, Charles M., et al.	257	14	12/11/2001
1	US-4,232,326	11/04/1980	Neidig, Arno, et al.	257	253	07/26/1978
7	US-4,437,969	03/20/1984	Covington, Arthur K., et al.	257	253	04/08/1982
	US-4,636,827	01/13/1987	Rudolf, Felix	257	253	09/20/1985
Quil	US-5,071,770	12/10/1991	Kolesar Jr., Edward S.	436	151	11/05/1990

	FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Foreign Document No	Publication Date	Name of Patentee or Applicant of cited Document	Class	Subclass	T²

	OTHER	R DOCUMENTS NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No 1	include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
are	/	BERGVELD, P., "A Critical Evaluation of Direct Electrical Protein Detection Methods", Biosensors & Bioelectronics, 6, (1991), 55-72	
		BERGVELD, P., "Development of an Ion-Sensitive Solid-State Device for Neurophysiological Measurements", <u>IEEE Trans. Biomedical Engineering, BME-17 (1)</u> , (1970), 70-71	
		BOAHEN, K. A., "The Retinomorphic Approach: Pixel Parallel Adaptive Amplification, Filtering, and Amplification", In: Neuromorphic Systems Engineering: Neural Networks in Silicon, T.S. Lande, Ed., Boston: Kluwer, (1998), 129-150	
	-	COLAPICCHIONI, C., et al., "Immunienzymatic Assay Using CHEMFET Devices", Sensors and Actuators B: Chemical, 4(3-4), (June 1991), 245-250	
		DEWA, A. S., et al., "Biosensors", In: Semiconductor Sensors, Chapter 9, Edited by S.M. Sze. John Wiley and Sons, (1994), 425-472 **	
		DIORIO, C., et al., "A Complementary Pair of Four-Terminal Silicon Synapses", Analog Integrated Circuits and Signal Processing, 13 (1-2), (1997), 153-166	
		DIORIO, C., et al., "A Floating-Gate MOS Learning Array with Locally Computed Weight Updates", IEEE Transactions on Electron Devices, 44 (12), (December 1997), 2281-2289	
		DIORIO, C., et al., "Floating-Gate MOS Synapse Transistors", In: Neuromorphic Systems Engineering: Neural Networks in Silicon, T.S. Lande, Ed., Boston: Kluwer, (1998), 315-338	
a w	/	FRAGNIERE, E., et al., "An Analogue VLSI Model of Active Cochlea", In: Neuromorphic Systems Engineering: Neural Networks in Silicon, T.S. Lande, Ed., Boston: Kluwer, (1998), 19-48	

EXAMINER	On	de file	DATE CONSIDERED	3/21	1/05
	-				

PTO/SBOBA(1001)
of for use Brough 10/31/2002, OME 651-0031
seems Octor U.S. DEPARTMENT OF COMMERCE
unless it contains a valid OME control number

Substitute for form 1449A/PTO	Complete II Known	The state of the s	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Application Number	10/695,432	
(Use as many sheets as necessary)	Filing Date	October 28, 2003	
	First Named Inventor	Kan, Edwin	
	Group Art Unit	2812.5	
	Examiner Name	Unknown M, WILSON	
Sheet 2 of 4	Attorney Docket No: 1	1153.078US1	

	OTHER	R DOCUMENTS NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	1,
Olle	/	GRODZINKSY, A. J., et al., "Electrokinetic Seperations", In: Biotechnology: a multi-volume comprehensive treatise, 2nd Ed., Vol. 3, H J Rehm; Gerald Reed; A Puhler; P Stadler; H Sahm - Authors; Cambridge: VCH.,(1993), 680-693	
1		HASLER, PAUL, et al., "Adaptive Circuits and Synapses using pFET Floating-Gate Devices", In: Learning on Silicon: adaptive VLSI neural systems, G. Cauwenberghs and M. Bayoumi, Eds., Boston: Kluwer, (1999), 33-65	
	·	HASLER, P., et al., "Floating-Gate Devices: They Are Not Just for Digital Memories Anymore", ISCAS'99. Proceedings of the 1999 IEEE International Symposium on Circuits and Systems VLSI, (June 1999), 388-391	
		HERMANS, E.C. M., "CO, CO/sub 2/CH/sub 4/ and H/sub 2O sensing by polymer covered interdigitated electrode structures", Sensors and Actuators, 5(3), (May 1984), 181-186	
		KAN, E. C., et al., "Si Fleas: Technology Demonstration of Functional Modules in Submillimeter Autonomous Microsystems", <u>Invited Talk, Ninth Foresight</u> <u>Conference on Molecular Nanotechnology</u> , Santa Clara, CA,(Nov. 9-11, 2001),	
		KRUGER, W. F., et al., "An Adaptive WTA Using Floating-Gate Technology", In: Advances in Neural Information Processing Systems 9, M.C. Mozer, et al, Eds., London: MIT Press, (1997), 720-726	
		LEMAN, E S., et al., "Characterization of the nuclear matrix proteins in a transgenic mouse model for prostate cancer", <u>Journal of Cellular Biochemistry</u> , 86(2), (2002), 203-212	
		LIU, Z., et al., "Eluding metal contamination in CMOS front-end fabrication by nanocrystal formation process", Self-Assembly Processes in Materials. Symposium (Mater. Res. Soc. Proceedings, Volume 707, (2002), 199-204	
		LIU, S.C., et al., "Homeostasis in a Silicon Integrate-and-Fire Neuron", In: Advances in Neural Information Processing Systems 13, T.K. Leen, et al., Eds., London: MIT Press, (2001), 727-733	
		LIU, ZENGTAO, et al., "Novel Electrostatic Repulsion Forces in MEMS Applications by Nonvolatile Charge Injection", The Fifteenth IEEE International Conference on Micro Electro Mechanical Systems, (2002), 598 - 601	
		LIU, ZENGTAO, et al., "Process and device characteristics of self-assembled metal nano-crystal EEPROM", <u>Superlattice and Mircrostructures</u> , 28 (5-6), (November 2000), 393-399	
		MA, T. P., "Making Silicon Nitride film a Viable Gate Dielectric", <u>IEEE</u> <u>Transactions On Electron Devices, 45(3), (March 1998), 680-690</u> MEAD, C., "Neuromorphic Electronic Systems", <u>Proceedings of the IEEE,</u>	
1		78(10), (October 1990), 1629-1636 MINCH, BRADLEY A., et al., "A Floating-Gate Technology for Digital CMOS	
Ou		Processes", ISCAS '99. Proceedings of the 1999 IEEE International Symposium on Circuits and Systems, (June 1999), 400-403	

EXAMINER DATE CONSIDERED

Substitute for form 1449A/PTO	Complete il Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Application Number	10/695,432
(Use as many sheets as necessary)	Filing Date	October 28, 2003
	First Named Inventor	Kan, Edwin
	Group Art Unit	2812 5
	Examiner Name	Unknown A, Wikow
	Attenney Dookst No. 1	
Sheet 3 of 4	Attorney Docket No: 1	100.070001

	OTHER	R DOCUMENTS NON PATENT LITERATURE DOCUMENTS	
Examiner initials*	Cite No 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
	/	MINCH, BRADLEY A., "A Folded Floating-Gate Differential Pair for Low-Voltage	
Dula		Applications", The 2000 IEEE International Symposium on Circuits and Systems,	
עאונעא		Proceedings. ISCAS 2000 Geneva. Volume: 4, (May 2000), 253-256	
		MINCH, B. A., et al., "A Silicon Axon", In: Advances in neural information	
		processing systems 7, Authors - Gerald Tesauro; David S Touretzky; Todd	
l f		Leen; Cambridge, Mass.: MIT Press, (1995), 739-746	1
		MINCH, BRADLEY A., et al., "A vMOS Soft-Max Current Mirror", 1995 IEEE	
1 1 1		International Symposium on Circuits and Systems, ISCAS '95., Volume: 3, (May	ĺ
	•	1995), 2249-2252	
		MINCH, BRADLEY A., "Evolution of a Folded Floating-Gate Differential Pair",	
		Proceedings of the 43rd IEEE Midwest Symposium on Circuits and Systems,	
		Volume 3, (May 2000), 1052-1056	
		MINCH, B. A., "Multiple-Input Translinear Element Log-Domain Filters", IEEE	
		Transactions on Circuits and Systems II, 48(1), (January 2001), 29-36	
		MINCH, B. A., et al., "Multiple-Input Translinear Element Networks", IEEE	
		Transactions on Circuits and Systems II, 48(1), (January 2001), 20-28	
		MINCH, B. A., et al., "Translinear Circuits Using Subthreshold Floating-Gate	
\		MOS Transistors", Analog Integrated Circuits and Signal Processing, 9(2),	
		(1996), 167-179	
		NEUBERGER, R., et al., "High-electron mobility AlGaN/GaN transistors	
		(HEMTs) for fluid monitoring applications", Physica Status Solidi A, 185(1), (May	
		2001), 85-89	
		RABAEY, JAN M., et al., "Designing Memory and Array Structures", In: Digital	
		Integrated Circuits: a design perspective, Upper Saddle River, N.J.: Prentice	
1 1		Hall,(1996), 551-628	
		SARPESHKAR, R., et al., A Low-Power Wide-Dynamic-Range Analog VLSI	
		Cochlea", In: Neuromorphic Systems Engineering: Neural Networks in Silicon,	
		T.S. Lande, etal, Eds. Boston: Kluwer, (1998), 49-104	
		SCHALWIG, J., et al., "Group-III-nitride based gas sensing devices", Physica	
1 1		Status Solidi A, 185(1), (May 2001), 39-45	
1-1		SHEPHERD, GORDON M., et al., "Olfactory Bulb", In: The Synaptic	
		Organization of the Brain, G.M. Shepherd, Ed. 3rd ed., New York: Oxford	
		University Press,(1990), 133-169	
		SHIBATA, T., et al., "A Functional MOS Transistor Featuring Gate-Level	
		Weighted Sum and Threshold Operations, IEEE Transactions on Electron	
1 1		Devices, 39(6), (1992), 1444-1455	
		SIU, W. M., et al., "Basic Properties of the Electrolyte-SiO2-Si System: Physical	
	/	and Theoretical Aspects", IEEE Transactions on Electron Devices, ED-26(11),	
1111	/	(1979), 1805-1815	
W W		\mathcal{T}	
~			

EXAMINER	O,	Wi	1	<u> </u>	DATE CONSIDERED	3/21	1/05
			Substitute Dischoure States	TOTAL LAST		7 7	

Substitute Disclosure Statement Form (PTO-1449)

- EXAMIDIER: tribbal If reference considered, whether or not cluston is in conformation with MPEP 600, Draw line through cluston If not in conformations and not considered. Include copy of this form with next conspicers, i Applicant, i Applicant's unique cluston designation number (continual) a Applicant is to place a check mark here if English tanguage Translation is attached

ROMONTAL CITEA

PTO/SBIGGA (10-01)
Approved for use through 10/31/2002, QMB 651-0001
Paint & Trichment Office: U.B. DEPARTMENT OF CONNERCE

Substitute for form 1449APTO	Complete Il Known	
	Application Number	10/695,432
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)	Filing Date	October 28, 2003
	First Named Inventor	Kan, Edwin
	Group Art Unit	2812 5
	Examiner Name	Unknown A, W3/100
Sheet 4 of 4	Attorney Docket No: 1	153.078US1

	OTHE	R DOCUMENTS NON PATENT LITERATURE DOCUMENTS	
Examiner initials*	Cite No 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	1,
Ode	/	STEINER, F. P., et al., "Polymer Coated Capacitive Microintegrated Gas Sensor", 8th International Conference on Solid-State Sensors and Actuators and Eurosensors IX. Digest of Technical Papers, (June 1995), 814-817	
0/10/		YAMAMOTO, T., et al., "An Integrated Temperature and Humidity Sensor", Proc. Transducers'87, Tokyo, Japan, (June 1987), 658-660	

EXAMINER (D) A MILLE DATE CONSIDERED 3/21/05